

REMARKS

Applicants have carefully studied the outstanding Office Action. The present amendment is intended to place the application in condition for allowance and is believed to overcome all of the objections and rejections made by the Examiner. Favorable reconsideration and allowance of the application are respectfully requested.

Applicants have amended claims 1, 4, 10, 25, 28, 34, 44, 51, 54, 60, 75, 78, 84 and 94 to more properly claim the present invention. No new matter has been added. Claims 1 – 102 are presented for examination.

On pages 2 – 5 of the Office Action, the Examiner has rejected claims 1 – 7, 10, 16, 23, 25 – 31, 34, 40 – 43, 51 – 57, 60, 66, 73, 75 – 81, 84, 90 – 93, 101 and 102 under 35 U.S.C. §102(b) as being anticipated by Chang et al., U.S. Patent No. 5,627,979 (“Chang”).

On pages 5 – 9 of the Office Action, the Examiner has rejected claims 11 – 14, 17 – 22, 35 – 38, 45, 50, 61 – 64, 67 – 72, 85 – 88, 95 and 100 under 35 U.S.C. §103(a) as being unpatentable over Chang and Yeager et al., U.S. Patent No. 5,950,190 (“Yeager”).

On pages 9 and 10 of the Office Action, the Examiner has rejected claims 8, 9, 24, 32, 33, 44, 58, 59, 74, 82, 83 and 94 under 35 U.S.C. §103(a) as being unpatentable over Chang and Tuli, U.S. Patent No. 6,003,034 (“Tuli”).

On pages 10 and 11 of the Office Action, the Examiner has rejected claims 15, 39, 65 and 89 under 35 U.S.C. §103(a) as being unpatentable over Chang and Wical, U.S. Patent No. 6,112,201 (“Wical”).

On pages 11 and 12 of the Office Action, the Examiner has rejected claims 46 – 49 and 96 – 99 under 35 U.S.C. §103(a) as being unpatentable over Chang and Yeager and further in view of Tuli.

On page 2 of the Office Action, the Examiner, in rejecting claims 51 and 75, has not addressed the limitation of an ontology.

On page 6 of the Office Action, the Examiner, in rejecting claims 11, 35, 61 and 85, cites Yeager, FIG. 4 and col. 10, lines 11 – 22, as teaching a search tool for searching for functions within the domain of the class. Applicants respectfully submit that Yeager teaches searching for table entries, but does not teach searching for functions. This is clear from the description of FIG. 4 in Yeager, and from the results window shown in FIG. 6 of Yeager. Specifically, the search illustrated in FIG. 4 corresponds to a search for all inventory objects including the word “Camera” in their description, and the search results include the objects listed in window 70 of FIG. 6. In distinction, the present invention searches for functions, such as an “Author” function, or a “Name” function, that act on a specific class, as described in the original specification at page 45, lines 22 – 27.

In order to further clarify the distinction between searching for contents, as in Yeager, and between searching for functions, as in the present invention, applicant has amended claims 10, 34, 60 and 84 to include the limitation of functions being binary relations between two classes, one class being the domain of the function and the other class being the co-domain of the function, as described in the original specification at page 3, lines 5 – 9, and at page 10, lines 30 and 31.

On page 9 of the Office Action, the Examiner has cited Chang, col. 13, lines 39 – 42, as teaching the transition from the display of a class instance to that of a class icon. Applicant respectfully submits that Chang does not teach display of a class instance, but instead teaches display of a class. Indeed icon 1070 of FIG. 15 is an icon for the Person class.

On page 13 of the Office Action, the Examiner has responded to applicant's arguments, and indicates that Chang teaches specific instances of classes.

Applicants respectfully submit that although Chang teaches specific instances of classes, the graphical user interface of Chang does not include icons representing instances of classes. Thus icons 860, 880 (FIG. 8), icon 1070 (FIGS. 14, 15, 16), icon 2110 (FIG. 21), icon 2410 (FIG. 24), icon 2510 (FIG. 25), icon 2610 (FIG. 26) and icon 2740 (FIG. 27), all represent generic classes, and not instances of classes. Chang refers to all of these icons as “class” or “subclass” or “interface type” and, as such, the icons do not represent instance of classes. Chang clearly differentiates between classes and instances (col. 2, lines 1 – 5; col. 2, line 66 – col. 3, line 3). Applicants agree with the Examiner that Chang teaches that the tables include rows of attribute values. However, as such, icons representing instances of classes would correspond to separate icons for each of the individual rows of a table – which is not described in Chang, and would be impractical for the method and system taught by Chang.

In order to further clarify the distinction between browsing classes and between browsing instances of classes, applicants have amended independent claims 1, 25, 51 and 75 to include the limitations of (i) selecting and viewing an icon representing a specific instance, I1, of a specific class, C1, (ii) viewing a list of one or more relations relating the class C1 to other classes, (iii) selecting a specific relation, R, within the list, and (iv) viewing an icon representing an instance, I2, of another class, C2, related to the instance I1 according to the selected relation R.

The rejections of claims 1 - 102 in pages 3 - 13 of the Office Action will now be dealt with specifically.

As to amended independent claim 1, applicant respectfully submits that the limitation in claim 1 of:

“a graphical user interface communicating with said server and interactively displaying icons representing instances of classes as a user browses said information model and navigates from one instance to another via the relations, wherein information about instances from more than one repository is graphically accessible from the same icon, the graphical user interface enabling a user to interactively (i) select and view an icon representing a specific instance, I1, of a specific class, C1, (ii) view a list of one or more relations relating the class C1 to other classes, (iii) select a specific relation, R, within the list, and (iv) view an icon representing an instance, I2, of another class, C2, related to the instance I1 according to the selected relation R”

is neither shown nor suggested in Chang, Yeager, Tuli or Wical.

Because claims 2 - 24 depend from claim 1 and include additional features, applicant respectfully submits that claims 2 - 24 are not anticipated or rendered obvious by Chang, Yeager, Tuli and Wical, taken alone or in combination.

Accordingly claims 1 - 24 are deemed to be allowable.

As to amended independent claim 25 and independent claim 101 for a compute readable medium, applicant respectfully submits that the limitation in claim 25 of:

“interactively displaying icons representing instances of classes as a user browses the information model and navigates from one instance to another via the relations, based on said responding, whereby instance documents from more than one repository are graphically accessible from the same icon, thereby enabling a user to (i) select and view an icon representing a specific instance, I1, of a specific class, C1, (ii) view a list of one or more relations relating the class C1 to other classes, (iii) select a specific relation, R, within the list, and (iv) view an icon representing an instance, I2, of another class, C2, related to the instance I1 according to the selected relation R”

is neither shown nor suggested in Chang, Yeager, Tuli or Wical.

Because claims 26 - 50 depend from claim 25 and include additional features, applicant respectfully submits that claims 26 - 50 are not anticipated or rendered obvious by Chang, Yeager, Tuli and Wical, taken alone or in combination.

Accordingly claims 25 - 50 and 101 are deemed to be allowable.

As to amended independent claim 51, applicant respectfully submits that the limitation in claim 51 of:

“a graphical user interface communicating with said computer network interactively displaying icons representing instances of classes as a user browses said ontology and navigates from one instance to another via the relations, the graphical user interface enabling a user to interactively (i) select and view an icon representing a specific instance, I1, of a specific class, C1, (ii) view a list of one or more relations relating the class C1 to

other classes, (iii) select a specific relation, R, within the list, and (iv) view an icon representing an instance, I2, of another class, C2, related to the instance I1 according to the selected relation R”

is neither shown nor suggested in Chang, Yeager, Tuli or Wical.

Because claims 52 - 74 depend from claim 51 and include additional features, applicant respectfully submits that claims 52 - 74 are not anticipated or rendered obvious by Chang, Yeager, Tuli and Wical, taken alone or in combination.

Accordingly claims 51 - 74 are deemed to be allowable.

As to amended independent claim 75 and independent claim 102 for a computer readable medium, applicant respectfully submits that the limitation in claim 75 of:

“interactively displaying icons representing instances of classes as a user browses the ontology and navigates from one instance to another via the relations, based on said responding, thereby enabling a user to interactively (i) select and view an icon representing a specific instance, I1, of a specific class, C1, (ii) view a list of one or more relations relating the class C1 to other classes, (iii) select a specific relation, R, within the list, and (iv) view an icon representing an instance, I2, of another class, C2, related to the instance I1 according to the selected relation R”

is neither shown nor suggested in Chang, Yeager, Tuli or Wical.

Because claims 76 - 100 depend from claim 75 and include additional features, applicant respectfully submits that claims 76 - 100 are not anticipated or rendered obvious by Chang, Yeager, Tuli and Wical, taken alone or in combination.

Accordingly claims 75 - 100 and 102 are deemed to be allowable.

Support for Amended Claims in Original Specification

Independent claims 1, 25, 51 and 75 have been amended so as to include the limitations of (i) selecting and viewing an icon representing a specific instance, I1, of a specific class, C1, (ii) viewing a list of one or more relations relating the class C1 to other classes, (iii) selecting a specific relation, R, within the list, and (iv) viewing an icon representing an instance, I2, of another class, C2, related to the instance I1 according to the selected relation R. These limitations are described in the original specification in FIGS. 22A – 22E and the descriptions of these figures at page 42, line 12 – page 43, line 13; and in the steps listed at page 45, lines 10 – 36.

Dependent claims 4, 28, 54 and 78 have been amended to correspond to the description in the original specification at page 43, lines 34 – 36.

Dependent claims 10, 34, 60 and 84 have been amended so as to include the limitation of a function being a binary relation that accepts as input an instance of a first

class, referred to as the domain of the function, and produces as output a corresponding instance of a second class, referred to as the co-domain of the function. This limitation is described in the original specification at page 3, lines 5 – 9 and in the glossary of terms at page 10, lines 30 and 31.

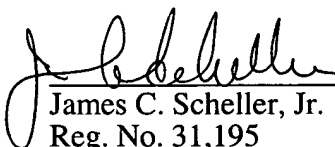
For the foregoing reasons, applicant respectfully submits that the applicable objections and rejections have been overcome and that the claims are in condition for allowance.

Please charge any shortage of fees to Deposit Account No. 02-2666.

Respectfully submitted,

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